

Amendments to the Claims:

A listing of the entire set of pending claims (including amendments to the claims, if any) is submitted herewith per 37 CFR 1.121. This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently amended) Data storage apparatus ~~(1)~~ comprising a data storage medium ~~(2)~~, in particular a disc drive ~~(1)~~ comprising a data storage disc ~~(2)~~, formatted in a pre-determined format architecture comprising a plurality of at least one format feature ~~(8, 9, 10, 11, 12, 13, 14)~~, and having a user area and a spare area defined thereon, characterised in that wherein the format architecture provides a plurality of spare area arrays ~~(30, 40a, 40b)~~ wherein each of the spare area arrays ~~(30, 40a, 40b)~~ is respectively assigned to essentially each of the plurality of the at least one format feature ~~(8, 9, 10, 11, 12, 13, 14)~~.

2. (Currently amended) ~~Data storage apparatus as claimed in~~ The apparatus of claim 1, characterised in that wherein essentially each of a plurality of tracks ~~(8)~~ comprises at least one spare area array ~~(30, 40a, 40b)~~.

3. (Currently amended) ~~Data storage apparatus as claimed in~~ The apparatus of claim 1, wherein a spare area array (30, 40a, 40b) comprises at least one and up to one hundred spare sectors, in particular up to ten, advantageously five spare sectors per track.

4. (Currently amended) ~~Data storage apparatus as claimed in~~ The apparatus of claim 1, characterised in that wherein the format architecture provides a skew ~~(18, 48)~~ for two adjacent tracks ~~(n, n + 1)~~ being a mutual shift in place of corresponding sectors of two adjacent tracks ~~(n, n + 1)~~ in circumferential ~~a circumferential~~ direction ~~(19)~~.

5. (Currently amended) ~~Data storage apparatus as claimed in~~ The apparatus of claim 4, characterised in that wherein sectors of an outer track ~~(n)~~ are shifted circumferentially ~~circumferentially~~ in the direction of rotation of the disc relative to corresponding sectors of an inner track ~~(n+1)~~, wherein ~~in particular~~ the shift comprises at least the minimum number of sectors passed during a track switch upon rotation ~~(19)~~ of the disc and/or a number of spare sectors ~~(40a, 40b)~~ comprised by a spare area array assigned to a respective track.

6. (Currently amended) ~~Data storage apparatus as claimed in~~ The apparatus of claim 4, characterised in that wherein a skew is extended by a number of sectors of one to ten.

7. (Currently amended) ~~Data storage apparatus as claimed in~~ The apparatus of claim 4, characterised in that wherein the format architecture provides a parameter to set the skew ~~(48)~~ in correlation with the size of the spare area array ~~(30, 40a, 40b)~~.

8. (Currently amended) ~~Data storage apparatus (4) as claimed in claim 1, characterised in that wherein~~ a controller ~~(6)~~ having a control electronics, a microprocessor and a memory is provided wherein a buffer memory (RAM, ROM) is adapted for intermediate storing of data and the controller ~~(6)~~ is adapted to record the intermediate storing, wherein further an interface for connecting the storage apparatus to a host ~~(7)~~ is provided.

9. (Currently amended) Method for handling a ~~the~~ data storage apparatus ~~(1)~~, in particular a data storage apparatus ~~(1)~~ according to of claim 1, the apparatus comprising a data storage medium ~~(2)~~ formatted in a pre-determined architecture having a plurality of format features, and having a user area and a spare area defined thereon, wherein upon a data request of a host a controller ~~(6)~~ provides at least one format feature of the data, ~~in particular including~~ at least a track and a

sector, and wherein the medium-(2) is rotated-(19) and a head-(3) is moved and actuated to access the format feature to transfer data therewith, characterised in that wherein the format architecture provides a plurality of spare area arrays (30, 40a, 40b), wherein each of the spare area arrays (30, 40a, 40b) is respectively assigned to essentially each of the format features such that a spare area (30, 40a, 40b) is passed beyond the head-(3) at least once before a track switch-(41).

10. (Currently amended) ~~Method as claimed in The method of~~ Method of claim 9, characterised in that wherein the format feature is selected from ~~the a~~ a group consisting of: zones (9, 10, 11), cylinders-(8), tracks-(8), and blocks (12, 13, 14).

11. (Currently amended) ~~Method as claimed in The method of~~ Method of claim 9, characterised in that wherein a spare area array (30, 40a, 40b) is passed beyond the head-(3) at least once after a track switch-(41), in particular ~~essentially first after a track switch~~ (41).

12. (Currently amended) ~~Method as claimed in The method of~~ Method of claim 9, characterised in that wherein the spare area array (30, 40a, 40b) is passed beyond the head-(3) at least once per rotation-(19) of the medium-(2).

13. (Currently amended) ~~Method as claimed in The method of~~ Method of claim 9, characterised in that wherein data are transferred as soon as the head-(3) is positioned on the format feature, in particular track-(8), determined by the controller-(6).

14. (Currently amended) ~~Method as claimed in The method of~~ Method of claim 13, characterised in that wherein the data are sequentially transferred and are intermediately stored in sequential order in a buffer memory-(RAM, ROM) and the data transfer is recorded by a controller-(6) and ~~subsequent subsequently~~ the data are read out from the buffer memory-(RAM, ROM) and are transmitted to the host-(7) in logical order.

15. (New) The apparatus of claim 5, wherein the format architecture provides a parameter to set the skew in correlation with the size of the spare area array.

16. (New) Data storage apparatus as claimed in claim 4, wherein a controller having a control electronics, a microprocessor and a memory is provided wherein a buffer memory (RAM, ROM) is adapted for intermediate storing of data and the controller is adapted to record the intermediate storing, wherein further an interface for connecting the storage apparatus to a host is provided.

17. (New) Data storage apparatus as claimed in claim 7, wherein a controller having a control electronics, a microprocessor and a memory is provided wherein a buffer memory (RAM, ROM) is adapted for intermediate storing of data and the controller is adapted to record the intermediate storing, wherein further an interface for connecting the storage apparatus to a host is provided.

18. (New) The method of claim 10, wherein the spare area array is passed beyond the head at least once per rotation of the medium.

19. (New) The method of claim 18, wherein data are transferred as soon as the head is positioned on the format feature, in particular track, determined by the controller.

20. (New) The method of claim 19, wherein the data are sequentially transferred and are intermediately stored in sequential order in a buffer memory and the data transfer is recorded by a controller and subsequently the data are read out from the buffer memory and are transmitted to the host in logical order.